Summaries of the 2000 Climate Protection Award Winners' Accomplishments

Corporate and Military Winners

Alcan Ingot, Sebree Aluminum Plant, a Division of Alcan Aluminum Corporation

Alcan, a Charter Member of the EPA Voluntary Aluminum Industrial Partnership (VAIP), reduced the emissions of greenhouse gases tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6) emissions by 50 percent after completing a "demand feed" project one year earlier than required by the partnership. Alcan has also been a consistent reporter of PFC emissions and has maintained a database for calculated PFC emissions and associated factors since 1995.

American Honda Motor Company

As the latest demonstration of global environmental leadership commitment, Honda introduced the first hybrid gasoline-electric vehicle nationally marketed to the American public. The Insight integrates a motor-assist hybrid powerplant with lightweight and aerodynamic vehicle technology to achieve almost twice the fuel economy of a conventional vehicle in both city and highway operation. The Insight achieves the highest fuel economy ever recorded in official EPA tests for a gasoline powered passenger car, and is first vehicle in the United States to use the lean-NO_x storage catalyst. The Insight was designed to help protect the climate and local air quality without compromise in comfort, safety, quality or performance. Honda is developing hybrid vehicle technology for other Honda models.

Architectural Services Department of the Government of the Hong Kong Special Administrative Region of the People's Republic of China

The Architectural Services Department provides professional services in the design, procurement, and maintenance of all non-residential community facilities in Hong Kong. The Architectural Services Department was the first government department to obtain certification under ISO 14001 and has exercised environmental influence on its clients, suppliers, contractors and consultants in over 270 projects. The Department has helped to protect the climate by implementing energy efficiency technologies in buildings by using environmentally friendly building materials for construction and by applying clean energy technologies. The Architectural Services Department is committed to advancing its contribution to the protection of the global climate.

AT&T Employee Telework Program

In 1999, the AT&T employee telework program (established in 1992) avoided 87 million miles of commuting (VMT), saving approximately 41,000 tons of carbon dioxide; 4.1 million gallons of gasoline; 180,000 tons of hydrocarbons; 1.4 million tons of carbon monoxide; and 93,000 tons of nitrous oxide. Recent innovations include identification

and replication of best practices; an intranet telework "portal" with readiness assessments and links to AT&T's resources; telephone surveys of participation, benefits and environmental impacts; a publicized "Earth Day is e-Day;" and AT&T's Telework Webguide (www.att.com/telework).

ICI Klea

ICI Klea is the first company in UK to install a vent treatment unit to destroy greenhouse gas by-products from its HCFC-22 production processes as part of its Integrated Pollution Control (IPC) authorisation process. The vent treatment unit has eliminated approximately 1,100 tons per year of HFC-23 emissions (equivalent to 13 million tons of carbon dioxide) and 850 tons of HCFC and HFC emissions (equivalent to 1.1 million tons of CO_2) per year. ICI Klea's Rocksavage (UK) Works converts all of its by-product gases into harmless salts, water vapour, and useful products. This investment by ICI Klea has reduced the UK's total emissions of all greenhouse gases by 2 – 3 percent.

Intel Corporation

Intel pioneered power management features that allowed customers to save energy when computers are left on but are not being used. However, when this power management feature is disabled, the computer remains at full power – wasting a lot of energy and money. Now, major personal computer manufacturers are shipping systems with Intel's Instantly Available PC (IAPC), an improved sleep-state power management technology that allows PCs to go into a low-power sleep state when not in use, yet retain its capability to answer wake events such as keyboard and mouse movements. IAPC is an open platform developed by Intel Corporation.

Novellus Systems

Novellus Systems manufactures advanced wafer fabrication systems for the deposition of thin films for semiconductor manufacturing. Since 1995, Novellus has undertaken a vigorous R&D program that has dramatically improved the environmental performance of its equipment and processes through three technical breakthroughs. First, Novellus succeeded in optimizing C_2F_6-based chamber clean processes and in the substitution of C_3F_8 for C_2F_6, leading to PFC emissions reductions of 40-60 percent. Second, the Novellus Joint Development Program with Guild Associates developed and demonstrated catalytic oxidation technology for PFC destruction. Third, Novellus developed an NF3-based chamber clean processes that reduces PFC emissions by 90 percent or more. All Novellus 300mm platforms now use NF_3, and most 200mm platforms will have NF_3-based chamber cleans by the end of 2000.

Oregon Energy Facility Siting Council and Oregon Office of Energy

In 1997, the Oregon legislature unanimously passed a law that requires developers of new power plants to reduce the carbon dioxide emissions at least 17 percent. Developers can

choose to reduce a plant's net carbon dioxide emissions by either investing in power plant improvements or by paying the non-profit Oregon Climate Trust to acquire carbon offset projects. Since 1997, three gas-fired plants have met Oregon's carbon dioxide standard, with required offsets totaling more than 12 million metric tons. The Oregon Energy Facility Siting Council members stimulated the development of the law. They now review plant applications for compliance. The Oregon Office of Energy assesses proposed offset projects.

International Fuel Cells

International Fuel Cells (IFC), a unit of United Technologies Corporation, has demonstrated global leadership in climate protection by pioneering fuel cell technology for electric power production. IFC is the only company in the world with a commercially available fuel cell power system, the PC25™ power plant. IFC has delivered more than 200 PC25 power plants around the world, which have already reduced 600 million pounds of CO_2 emission and 11 million pounds of NO_X and SO_X compared with typical U.S. combustion-based power plants. PC25 units also have produced electricity using methane from landfills and wastewater treatment facilities.

Visteon Corporation

Visteon Corporation's new Superintegration™ and its complementary advanced technologies enable the integration of electrical, structural and multiple product functions. Fewer components, reduced weight, improved performance and superior quality lead to higher fuel economy and reduced vehicle emissions. It also allows the increased use of recovered, reused and recycled materials. Production applications have demonstrated savings of up to 30 percent system weight and as much as 50 percent part count reduction. Superintegration™ will help protect the climate in automotive, electronics and aerospace, as well as other consumer products.

Association Winners

American Portland Cement Alliance

In 1997 the American Portland Cement Alliance (APCA) formed a partnership with the EPA's Climate Wise program and recruited 18 of its members (representing 65percent of the United State's cement production). As part of the EPA's Climate Wise partnership, the APCA developed industry specific energy efficiency tools, provided technical assistance to its companies, and participated in the White House industry consultation process. The 18 partnership companies will reduce their carbon dioxide emissions by approximately 2.7 million tons (equivalent to 540,000 automobiles), reduce energy use by 25.5 MMbtus and save $2.3 million by the end of 2000. APCA also works with EPA to provide cement manufactures outside the United States with technical information on emerging products such as blended cement that are manufactured with lower emissions of greenhouse gases.

University of Colorado Environmental Center

Students, faculty, and staff at the University of Colorado have developed a blueprint that satisfies additional demands for energy; transportation and resources through increased efficiency rather than increased consumption and sets a university goal to reduce greenhouse gas emissions by 7percent below 1990 levels by 2010. Starting in 2000, Colorado University will purchase 2 million kilowatt-hours of wind generated electricity annually, making it the largest university green-power purchaser in the country and reducing CO_2 emissions by 2.8 million pounds/year. New transportation and recycling initiatives will also reduce carbon emissions.

The Real Estate Roundtable

The Real Estate Roundtable (RER) actively involves America's leading real estate owners, advisors, investors, and lenders on key environmental and other policy issues. After the Kyoto summit and Earth Day 1998, President Clinton challenged the real estate industry to find ways to develop and manage buildings for peak energy efficiency and to create a healthier indoor environment. Through the RER leadership – and with technical assistance from EPA and the Department of Energy – the industry was the first to submit a pledge to President Clinton to reduce 30 percent of their emissions by 2010.

Individual Winners

Ms. Sherri W. Goodman, U.S. Department of Defense

Ms. Sherri Goodman, the most senior U.S. Department of Defense (DoD) environmental policy maker, has helped DoD reduce its overall greenhouse gas emissions by approximately 26 percent while improving military capability. Under her leadership, DoD has initiated a program to understand how climate change will affect future military operations and sponsored a study by the Defense Science Board of how more fuel efficient weapons systems will improve warfighting capability and reduce operating costs. She also initiated a program to determine baseline emissions and instituted measures to continuously monitor carbon emissions and sinks. Through her support for DoD participation in the Intergovernmental Panel on Climate Change, these practical methodologies are being adopted worldwide. Ms. Goodman also established a comprehensive organizational structure that develops and implements climate policies, programs and procedures.

Dr. Jerry Mahlman, National Oceanic and Atmospheric Administration

Dr. Jerry Mahlman is the Director of the National Oceanic and Atmospheric Administration's Geophysical Fluid Dynamics Laboratory, the world's pioneer climate modeling Center. His research career has been directed at modeling, diagnosing, and understanding the behavior of the atmosphere and its implications for climate and chemical change. Over the past decade, he has occupied a central role in the direct

interpretation and communication of human-caused climate change to policy-makers and communities. Under his leadership over the last 15 years, the Geophysical Fluid Dynamics Laboratory has become widely recognized as one of the world's finest climate modeling centers, and a world leader in providing unbiased scientific information on the climate change problem.

Mayor Marc H. Morial, New Orleans

Under Mr. Morial's leadership, the City of New Orleans joined the Cities for Climate Protection Program. This program requires member cities to pass a climate protection resolution, to establish a baseline emissions profile, to identify a reduction target, to prepare a local action plan and to initiate actions to reduce multiple emissions. In 1997, New Orleans hosted a town-hall meeting of national and local leaders to discuss the risks of climate change and the vulnerabilities faced by New Orleans. New Orleans will host the next workshop of the Cities for Climate Protection that will focus on transportation and public education. Mr. Morial successfully submitted a resolution on climate change at the last United States Council of Mayors meeting to make global warming a priority and to develop and implement policies that work with local communities to reduce domestic sources of greenhouse gas emissions.

Ms. Tia Nelson, The Nature Conservancy

Ms. Tia Nelson develops and manages the Nature Conservancy's climate change project portfolio, worked to build capacity for developing country partners and led the Conservancy's efforts to promote the inclusion of land use change and forestry projects under the Kyoto Protocol's Clean Development Mechanism. In 1994, Tia Nelson spearheaded The Conservancy's efforts on Joint Implementation under the UNFCCC to develop the first fully funded forestry-based carbon sequestration project. Three projects are now in place with eight others in development. The Rio Bravo, Guaraquecaba, and Noel Kempff projects, with investments of $20 million, will sequester 11.4 million tons of carbon.

Mr. Nobuo Okubo, Nissan Motor Company

Mr. Nobuo Okubo is Chairman of Nissan's Environmental Management Committee, which sets company policies and goals related to environmental protection and evaluates the progress of Nissan's efforts. He is also responsible for implementing environmentally-friendly manufacturing technologies in Nissan's manufacturing plants worldwide and has been the visionary for Nissan's environmentally-friendly vehicle technologies and products such as the Hyper CVT, Direct Injection Gasoline engines, Direct Injection Diesel engines, EXTROID CVT, Sentra CA, Tino Hybrid and Hypermini. These advanced technology mass-produced vehicles contribute to significant improvements in fuel economy, climate protection and environment protection.

Dr. Robert T. Watson, The World Bank

Dr. Watson provides invaluable service through his leadership and contributions to the Intergovernmental Panel on Climate Change (IPCC). He chairs the IPCC, which is presently drafting the Third Assessment Report that describes the current state of climate change science, impacts and mitigation options. Dr. Watson's understanding of climate change science is vital to his efforts to guide the discussions during the assessment preparation. Equally important is Dr. Watson's ability to identify the scientific issues that are of prime importance to policymakers. Dr. Watson has provided scientific information to world leaders on key environmental issues such as climate change, ozone depletion, sustainable development, and biodiversity. He has presented extensively in international meetings, discussions, and testimonials before national and international decision-makers.